



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,773	12/08/2003	Arun Shah	68146988.719	4625

23562 7590 04/14/2005

BAKER & MCKENZIE  
PATENT DEPARTMENT  
2001 ROSS AVENUE  
SUITE 2300  
DALLAS, TX 75201

EXAMINER

AMSBURY, WAYNE P

ART UNIT	PAPER NUMBER
----------	--------------

2161

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/731,773

Applicant(s)

SHAH ET AL.

Examiner

Wayne Amsbury

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/8/03</u> . | 6) <input type="checkbox"/> Other: _____  |

CLAIMS 24-49 ARE PENDING

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action of the parent case, 09/837,114.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**Claims 24-49** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 6,662,174. Although the conflicting claims are not identical, they are not patentably distinct from each other because they each represent a broadening and/or an obvious further limitation of a claim of '174.

As an example, consider claim 24 in relation to claim 1 of '174. Claim 24 is essentially word-for-word the same as claim 1 of '174 except that it omits all or parts of: COL 11 lines 38-41, 49-51 and COL 12 lines 1-6.

The other claims admit to a similar analysis.

It is obvious to broaden the claims of an invention because this increases the utility of the invention with little or no additional cost.

**3. Claims 24-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Weissman et al (Weissman), US 6,212,524, 3 April 2001.**

Weissman is directed to creating and populating a datamart.

As to **claim 24**:

*A method of operating an analytical server which is positioned between a client and a Relational Database Management System (RDBMS), the method operable to provide an interface between the client and a relational database located on the RDBMS, the relational database having fact tables, dimension tables, and metadata describing the relationships between the fact and dimension tables*

System 100 of FIG 1 is an analytical server positioned between a client and a RDBMS. A datamart comprises fact, aggregate, and dimension tables [COL 17 line 62 to Col 18 line 2]. The central theme of the datamart system of Weissman is the use of metadata, as provided by the overview [COL 7 line 23 and after]. In particular note the definition of a constellation [COL 6 lines 12-16].

*receiving in the analytical server, from the RDBMS, at least a portion of the metadata information regarding the relational database and its organization, including information about a logical hierarchy of the fact and dimension tables.*

This information, as shown in FIG 5, is received and processed [COL 28 lines 22-53], and includes dimension role names, aggregate groups and the like.

*receiving in the analytical server, from the client, a metric query*

It is the nature of a datamart to support queries at a higher level (meaning aggregates and summaries) than does a simple RDB [COL 1 lines 61-64]. Weissman is specific about the receipt of such queries as in FIG 1 104 and the corresponding discussion [Col 8 lines 8-19 and elsewhere].

*determining, based on the received information regarding the logical hierarchy of the fact and dimension tables and based on the metric query received from the client, which hierarchical levels of the fact and dimension tables are available in the relational database for responding to the metric query.*

This determination is made at runtime in navigation of the system that determines which aggregates to use in response to a query [COL 27 lines 23-48].

*determining at least one database query according to the available hierarchical levels of the fact and dimension tables*

This occurs when a view is generated in response to a query [COL 27 lines 42-48].

*sending the determined at least one database query to the RDBMS whereby the metric query can be responded to by the analytical server based on responses of the RDBMS to the determined at least one database query.*

This is the point of the system, of course, and most simply is depicted in FIG 1, where the extraction program 120 communicates with the database source 110.

As to **claim 25**, Weissman is directed to organizing the datamart in the form of a star schema [COL 2 lines 26-38; Col 3 lines 36-40].

As to **claim 26**, an example of a table that stores the supported level for each dimension in the star schema is depicted in FIG 3. In more particular, FIG 5 shows supported levels for a date\_key (day, week, month, year). These examples correspond directly to the description of support levels in the parent ['174 COL 3 lines 32-42].

As to **claim 27**, the time dimension in Weissman is represented at least by the date special dimension [COL 14 lines 54-57], and is treated explicitly at COL 29 lines 59-65 and COL 30 line 57 and COL 31 line 14.

As to **claims 28-29**, an example of 4-level time dimension including years and months is shown in FIG 5 and the citations noted above *in re* claim 27.

As to **claim 30** Weissman teaches the use of one or more dimension tables (which include time dimensions). In the case of more than one dimension table two time dimension tables are supported.

As to **claim 31**, the metadata FIG 1 **160** includes security information [COL 8 lines 21-25] that is available for responding to a query and is otherwise accessible [COL 35 lines 37-38].

As to **claim 32**, the dimension usage within a constellation is defined within a ticksheet that defines the user interface objects [COL 31 lines 60-67; COL 32 lines 42-62 and 42-43 and 54-55 in particular]. The results are reported through a connector that determines extraction [COL 20 lines 8-14; lines 64-65]. Usage is specific for dimensions [COL 14 lines 27-29]. Output is in the form of reports [FIG 34].

As to **claim 33**, Weissman describes how predefined aggregates are used to answer different queries at COL 30 line 57 to COL 31 line 13].

**4. Claims 34-49 would be allowable upon receipt of a terminal disclaimer.**

**Claims 34-39** include: *a designation specifying by dimension which measures are additive and which measures are non-additive*. This is interpreted in light of the Specification [‘174 COL 4 lines 53-64] to be a flag included in the measure indicator. This feature, in combination with the other elements of the claims, is neither anticipated nor suggested by the prior art of record.

**Claims 40-49** include a test and resulting action that deals with a measure that is insufficiently fine in order to respond to a metric query. This feature, in combination with the other elements of the claims, is neither anticipated nor suggested by the prior art of record.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Amsbury whose telephone number is 571-272-4015. The examiner can normally be reached on M-F 6-18:30 FIRST WEEK.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2161

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WPA

  
WAYNE AMSBURY  
PRIMARY PATENT EXAMINER